App. F. IX-4

1926-7

File No. 15-26

Previous References

Gen 31-20 (1-4)

Gen)

Serial Nos. 1-6

Later References

preserve

(31)

General and Revenue Secretariat.

Serial Nos. Six

Part B for Jany 28.

SUBJECT

Additions to form E of the Mysore Explosives Rules

D 7656 dt 24-1-28

To

Compiler Mysore Gazette

Notifies the publication of the notification

Khanapur

G. R. S. III—1] (1) 1926

GENERAL AND REVENUE SECRETARIAT.

Ger

NOTES.

File No. 15.26

FILE HEADING.

Additions to Form E of the Explosives Rules

From The Chief Inspector of Mines

No. 141 Dated 22-7-26 Received

Diary No. 478	Enclos.	Spare Copies.	Serial No.

BRIEF ABSTRACT OF LETTER.

Requests orders in the matter of proposed additions to Form E of Explosives Rules

G

NOTES AND ORDERS.

1) The chief Inspector explains the necessity for the additional conditions to be embodied in Form E of the Explosives Rules

2) In case the adoption of the

NOTES—First Sheet.

WD 1881—GPB—30,000—1-8-21

Serial No.

Rules

new conditions is approved they have first to be notified in the Gazette as required under Sec. 15 of the Explosives Regns & the same procedure was adopted in a previous case (Genl. 120-24 81-11).

3) for orders

31/7/26.

4) Please bring up

31/7

5) As personally instructed a search was made as to whether all the rules or instructions issued in 1921 were sent to this office before publication, but no papers on the subject is available. The Dist. Mag. was asked to request the Chief Inspr of Explosives to publish the instructions himself in the Gazette & accordingly they appear under his signature (Chief Inspr of Explosives). These Rules are based on the rules in force under the Mines Regns - Chap. XIV - Blasting (Pages 20-22)

6) The existing conditions printed in Form E of the Explosives Rules are the same as those published in the same form in the Govt. of India Rules

7) Sec. 15 of the Regns

General and Revenue Secretariat | Rev File No. 15 of 1926.

Serial No.

lays down the procedure for mak publication &c. of Rules under the Regulation. Since the ~~contra~~ powe of the Chief Inspector is only to issu certain instructions for the guidan of licensees these cannot be considered as amendments to rules already issued. ~~to make the previous publication of them for the information of the public necessary.~~

8) Besides these (instructions) have already appeared in the Gazette under the signature of the ~~Chief~~ Insp^r of Explosives & as such their republication in the Gazette before formal inclusion in the form seems unnecessary.

9) If agreed. the Chief Insp^r will be authorised to embody them as additional conditions as proposed

10) For orders.

no 20/1/27.

him has somehow been out sight of, for a few months. I am sorry.

12) For favour of an expression of opinion whether it is necessary to publish the conditions once again in the Gazette — as part of the conditions of the licence (Form. E.) under Sec 15 of the Mysore Explosives Regulati

NOTE—Contn. Sheet

WD 01229—GPB—37,500—1-9-26
App. F. III—2]

General and Revenue Secretariat

5572 gsb
Rev 2 File No. 15 of 1926

Serial No.	
	or, whether the Chief Insp^r may be informed that he may incorporate the additional conditions in the license, on the strength of the previous publication in the Gazette in 1921, by the Insp^r of Explosives
Plag. Gr.	
	Asst Secy, Proh^n Br with compts. WP 6/6
	13) Since the precautions are intended to be endorsed as conditions of the license prescribed in Form E, the formalities of rule making prescribed in Section 16 should be observed. For Rule 38 refers to Sch I which refers to Form E The Sch & the forms are part of the Rules.
	A.S. Secy Br with compts 28/6 WP 6/6.
	14) Please ask the ch. Insp^r to send a draft amendment for the consn of Govt. — for publication in the Gazette. WP 6/6
	15) Draft sent 29/6/27 WP 6/6 Issue
2	To ~~the Chief Insp^r of Mines~~ No. D. 10986 dt 8.6.27.

NOTE—Contn. Sheet

8671 47

5

WD 01229—GPB—37,500—1-9-26

App. F. III—2]

General and Revenue Secretariat | Genl File No. 15 of 1926

Serial No.	
2	To the Chief Inspector of Explosives No. 10986 & 8/6/27 Requests him to submit a draft amendment to the form E of the Explosives Rules from the Chief Inspr. No. 2213 of 17/6/27.
3	Submits for the consideration of Govt. & for publication in the Gazette a draft amendment to the Conditions of License form E (Articles 7 and 8, Schedule I) of the Mysore Explosives Rules Secy's note (1) Put up with Regulations & existing Rules (sd) H.R. 14-6-27 (2) A copy of Regulation & Rules put up under Sec. 15 of the Explosives Regns a draft notice has to be published in the Gazette (cl. 3 of Sec. 15) (2) for orders. 22/6/27 (1) A notice containing the aft amendment proposed, may be published in the Gazette. Sec'y D) WR 24/6 (2) May be done. (I regret the delay in the subn of this file, which was due to its having got mixed up with other papers) 2nd Member) WR (23) 1/11/27 Approved 31-10-27 30/10/27
25/6	
1.11.27	

GEN. & REVENUE SECRETARIAT BRANCH. 11 JUNE 1927 DEVELOPMENT BRANCH.

COUNCIL 1927 2265

NOTE—Contn. Sheet

3317

App. F. III—2]

General and Revenue Secretariat. Legal File No. ~~Lett~~ 15 of 1926 6.

Serial No.	
4	From the Ch: Inspr of Explosives No. 657 & 18/10/27 suggests that the Kannada Translation of the 'List of authorised ~~publications~~ Explosives' may be got translated in the ~~Port~~ Tulu & Lambadi for getting the same printed & requests that early orders may be passed in the matter of amendments ~~already~~ to conditions of Licence ~~form~~ E already ~~passed~~ proposed & as regards fresh amendments since Sub-d 2a) The question may be taken up after ~~an~~ orders are passed in the matter of amendments already Sub-d 25) The ~~addition~~ incorporation of the additional amendments ~~also~~ to the same form E also require consideration 29.10.27 26) Kind attention is invited to paras 22 + 23 of notes - pages 5 27) Draft notifn Sub-d 7/11/27 29) DW Secy 8/11 30) Yes 9-11-27 9/11/27 8/11/27

E. G. 3/11/27
Asst. Secretary
23.6.27

28) Please get the file & re-submit
3.11.27

NOTE—Contn. sheet.

WD 0324—GPB—60,000—24-5-27

3317

App. F. III—2]

General and Revenue Secretariat. Genl File No. 15 of 1921

Serial No.

31) Please see paras 22 & 23. The Kannada Translation may await the amendments in the Rules. But the notification may issue forthwith the other additional conditions to be embodied in License Form E. may be submitted for approval.

Dy Secy) 10/11/27

32) Issue

12/11/27

Dy 12/11

5 To the Compiler, Mysore Gazette

No. 5345 dt 19-11-27

~~Notification that~~

Requesting him to notify that draft additional conditions to form E of the Explosives Rules ~~hitherto~~ will be taken into consideration on or after the 1st January 1928 & that any objections or suggestions, if any, may be sent up before that date.

No. 5345 dt 19.11.27 to the Chief Secretary forwarding copy of the above.

Dft: 21/11/27

NOTE—Contn. sheet.

GEN. & REV. SECRETARIAT
21 NOV 1927
DEVELOPMENT BRANCH

WD 0324—GPB—60,000—24-5-27

3317

App. F. III—2]

General and Revenue Secretariat. Geol File No. 15 of 1926.

Serial No.	
	33) the stipulated period prescribed in the notfn was 1st January 1928.
SC 5.	34) Since no objections or suggestions were received a draft notification (final) is filed. for orders.
	7.1.28
	35) Dft notfn for appl
	SecD) 7/1/28
7/1	2nd Member 13.1.28
	13/1
	16.1.28
	31) Issue
	16/1
	To the Compiler, Imperial Secy No. D. 7656 of 24-1-28 notifies the publication of the Notfn to the Chief Inspr. of Mines
	forwards Copy of the above No. D. 7657 of 24.1.28

OFFICE OF THE COUNCIL SECRETARIAT 821.67 JAN. 1928 No. 3885

GEN. SECRETARIAT 24 JAN. 1928 DEVELOPMENT BRANCH

NOTE—Contn. sheet.

WD 0824—GPB—60,000—24-5-27

03933

D. M. E 7.]

DEPARTMENT OF MINES AND EXPLOSIVES.

Telegraphic address;—
"MINESPECTOR."

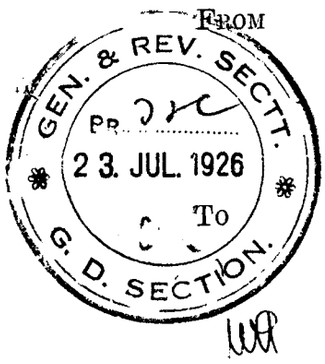
OFFICE OF THE CHIEF INSPECTOR OF MINES IN MYSORE.

No. 141
Encl. 2

Dated Oorgaum, 22nd July 1926.
(S. India.)

Geol. 15-26-1

2478



FROM

R. BOCQUET, ESQUIRE, J. P.,

CHIEF INSPECTOR OF MINES IN MYSORE.

C. Ranganatha Rao Sahib, Esq.; B.A., B.L.,
Secretary to the Government of
His Highness the Maharaja of Mysore,
Revenue Department, Bangalore.

Sir,

I have the honour to state that explosive accidents, outside the mining areas, are of fairly frequent occurrence being mainly due to the non-observance of the ordinary precautions by those engaged in blasting work. During 1924, there were reported to this Departmen eleven (11) such accidents resulting in the death of 6 persons and serious injuries to 12 others while, during 1925, nine accidents resulting in the death of 4 persons and serious injuries to 6 others were reported. In connection with a blasting accident that occurred in the Shimoga-Arasalu railway cutting near Yerekoppa-Hosur, Kumsi Sub-Taluk, in June 1920, this Department, acting under instructions from Government (vide Chief Secretary's letter No. G. 11832/Geol. 31-20-4 dated 16th December 1920) framed a set of important precautions based on the rules in force under the Mines Regulation - Blasting, Chapter XIV, Mysore Mining Rules - and published the same for the guidance of those engaged in such operations; copies were also distributed among all the District Officers, Engineers, etc., to give wide publicity to these precautions. As stated above, several instances have since come to the notice of this Department where the persons in charge of such operations have ignored these precautions and the authorities concerned are unable to take suitable action against them to bring home their responsibility for want of provision of these clauses in the Mysore Explosives Rules.

Following

2. Following a blasting accident in September 1925 in Anthegowdana Doddi, Kankanhalli Taluk, in which a cooly was killed owing to proper precautions not having been taken by those responsible for the work and the District Magistrate was asked to give his views and whether he contemplated taking any action, he wrote as follows:-

> "In this connection, I write to suggest that "it is quite necessary that some rules have "to be framed with regard to the use of "explosives, as in the case of Kolar Gold "Field area, so that the non-observance of "the rules would by itself be proof of "negligence without further evidence. The "provisions of the Penal Code alone are "difficult to apply, as the amount of proof "required by the Penal Code is usually diffi-"cult to secure."

3. From the experience gained so far, it is found that the precautions already published have not had the desired effect and, with a view to minimise the occurrence of accidents from explosives, it is suggested that these precautions may be embodied as additional conditions to "E" Form License, which is granted under Articles 7 and 8 of Schedule I, Mysore Explosives Rules, to all persons who wish to possess explosives bona fide for blasting purposes, so that the holder of the license is responsible for the due fulfilment of the precautions and, in case of default, can be dealt with under Rule 126 (9), Mysore Explosives Rules.

4. A copy of License Form "E", together with a copy of the precautions to be embodied in it as additional conditions, is submitted herewith for ready reference.

5. Early orders of Government are solicited in the matter.

I have the honour to be,

Sir,

Your most obedient servant,

K. Bocquet.

CHIEF INSPECTOR OF MINES

IN MYSORE.

R.S.

3

FORM E. No.....of 192 [FREE ——— OF CHARGE]

LICENSE

TO POSSESS GUNPOWDER OR OTHER EXPLOSIVES REQUIRED BONA FIDE FOR BLASTING PURPOSES.

Name, etc., of licensee and place of residence	
Description and quantity of explosive to be possessed during the year.	
Place, with full details, where explosive is to be possessed.	
Maximum quantity of explosives (not exceeding 100 lbs. gunpowder and 10 pounds of other explosives and 100 detonators) to be kept at any one time.	
Date on which license expires.	The 31st December 192

(Seal)

....District,

Dated.....192 .

District Magistrate.

CONDITION.

1. This license is granted subject to the provisions of the Mysore Explosives Regulation, 1888, and the rules thereunder.

2. The explosive shall be kept in a substantially constructed uninflammable building approved by such officer as the Government may prescribe, or in a fireproof safe separated from any dwelling-house, highway, street puplic thoroughfare or public place, by a distance of 50 yards and made and closed so as to prevent unauthorised persons from having accesst hereto and to secure it from danger from without.

Provided that 50 lbs. of gunpowder may be kept inside a dwelling-house or in any building other than as last aforesaid in a receptacle exclusively appropriated to keeping explosives.

3. All articles or substances of an explosive or highly inflammable nature shall be kept at a safe distance from the explosive and from any room or part of a building, fireproof safe, or receptacle containing the same, and no person entering such room or part of any building or such safe or receptacle shall have any iron or steel in his possession or attached to or on his boot or shoes.

4. Neither the building exclusively appropriated for the purpose of keeping the explosive, nor the fireproof safe or receptacle referred to above shall have any exposed iron or steel in the interior thereof:

Provided that this condition shall not be obligatory in a building, fireproof safe, or receptacle in which no explosive other than an explosive of the 1st Division of the 6th (Ammunition) Class is kept.

5. Gunpowder or other explosives exceeding one pound in quantity shall be kept in a substantial case, bag, canister or other receptacle made and closed so as to prevent the explosives from escaping.

6. The licensee shall at the time of purchase have the following particulars endorsed upon his license by the vendor from whom he purchases and under the vendor's signature:

(a) the name and address of the person who takes delivery of the articles purchased:

(b) the nature and amount of the articles purchased, and

(c) the date of purchase,

7. All losses, shortage of stock or thefts of explosives shall be reported without delay to the nearest Police Station.

Notification No. 244, dated 3rd March 1921.

The following more important precautions are specially recommended to be strictly observed by those that are engaged in blasting operations :—

(1) All blasting operations should as far as possible be conducted by a certified blaster.

(2) The blaster should himself prepare the fuse, detonator and primer for use and should charge every hole, but he may be assisted otherwise in the preparation of charges and in firing, by one or more competent assistants.

(3) During the preparation of charges and the charging of holes and while explosives are being handled, smoking should be strictly prohibited.

(4) The fuse with its attached detonator should, after being inserted in the primer cartridge, be securely fastened by a string or other suitable material so that it cannot be easily withdrawn from the cartridge. The fuse and the detonator should not be inserted in the primer until it is required for immediate use.

(5) In charging or stemming holes the use of any iron or steel tool, scraper or rod is prohibited and no explosive should be forcibly pressed into a hole of insufficient size.

(6) Even with wooden implements the cartridges should be squeezed home gently in the borehole, and never rammed with any force that might be liable to establish dangerous friction.

(7) A wad of paper about one inch thick must be inserted immediately on the top of the primer and below the tamping which should be at least 6″ deep. Only sand loosely filled in or soft clay lightly pressed home or water, should be used as tamping for any explosive requiring the use of a detonator.

(8) No more than eight holes at a time in a place exceeding 60 sq. feet and not more than 6 holes in smaller area, should be fired in the same round.

(9) Blasting gelatine or other high explosive should not be lighted in order to set fire to fuses, but a small portion of such explosive may be attached to the end of a fuse to assist it to ignite.

(10) The number of shots which explode must be counted independently by at least two persons, one of whom should be the blaster. Unless both are certain that all the charges have exploded the working place must not be re-entered for at least 30 minutes after the first explosion.

(11) After blasting has taken place, the blaster or person in charge of the working place should be the first to re-enter the place and until he has pronounced that there was no misfire and that the place is sufficiently free from fumes he should not permit any other person to enter except for the purpose of making it safe.

(12) In clearing the stuff broken by the blast, loose unexploded cartridges, detonators, etc., must be carefully looked for and if found, removed at once by the blaster or mestry in charge, to a safe place.

(13) Before drilling is commenced, all loose rock must be removed from the working faces and if any sockets or portions of holes, which have not broken are found they should be securely plugged with wooden plugs of which a supply should always be provided.

(14) In the event of misfire (or charge failing to explode properly) having occurred or being suspected, the blaster should be the first to re-enter the working place. He should search for the misfire and, if necessary, may have the place cleaned up for the purpose; but he should permit no other person or work.

(15) As soon as the misfire has been found, the blaster should refire it without delay, for which purpose he should insert a fresh primer with detonator and fuse in the hole. If necessary, the tamping may be gently removed with a wooden or copper scraper, but not the paper wad.

(16) Boring out or deepening holes once charged or withdrawing a charge either before firing or after misfire, must not be attempted.

(17) The person in charge of the working place should point out the position and direction of every new hole to be drilled and should be responsible that the drillers do not deviate therefrom. The greatest care should be taken to see that no new hole is bored in such a direction that it can come in dangerous proximity to any old hole or socket in which explosives have previously been charged.

(18) A fuse which has apparently missed or is hanging fire should not be approached for at least half an hour.

(19) The burning capacity and steady consumption of any fuse employed and its requisite length have to be carefully studied and noted before use and only fuses of known quality and rate of burning should be used.

A. T. SETLUR,
Inspector of Explosives in Mysore.

b

EXTRACTS FROM THE EXPLOSIVE RULES DEFINING CLASSES AND DIVISIONS OF CLASSES OF EXPLOSIVES.

Class 1 ... Gunpowder.	Class 3 ... Nitro-compound.	Class 5 ... Fulminate.	Class 7 ... Firework.
Class 2 ... Nitrate-mixture.	Class 4 ... Chlorate-mixture.	Class 6 ... Ammunition.	

And when an explosive falls within the description of more than one class, it shall be deemed to belong exclusively to the latest of the classes within the description of which it falls.

Class 1.—Gunpowder Class.

The term "gunpowder" means exclusively gunpowder ordinarily so called.

Class 2.—Nitrate-mixture Class.

The term "nitrate-mixture" means any preparation, other than gunpowder ordinarily so called, formed by the mechanical mixture of a nitrate with any form of carbon or with any carbonaceous substance not possessed of explosive properties, whether sulphur be or be not added to such preparation, and whether such preparation be or be not mechanically mixed with any other non-explosive substance.

Class 3.—Nitro-compound Class.

The term "nitro-compound" means any chemical compound possessed of explosive properties, or capable of combining with metals to form an explosive compound, which is produced by the chemical action of nitric acid (whether mixed or not with sulphuric acid) or of a nitrate mixed with sulphuric acid upon any carbonaceous substance, whether such compound is mixed or combined with other substances or not.

The nitro-compound class has two divisions :—

(*a*) Division 1 comprising :—

(1) Such explosives as—

Ballistite,	Carbonite,	Dynamite,	Gelignite,
Blasting gelatine,	Cordite,	Gelatine dynamite	Nitro-glycerine,

and Stonite.

(2) Any chemical compound or mechanically mixed preparation which consists either wholly or partly of nitro-glycerine or of some other liquid nitro-compound.

(*b*) Division 2 comprising :—

(1) Such explosives as—

Amberite No. 2,	Coopal's powder,	Picric powder,
Ammonite,	E. C. Sporting powder,	Roburite,
Bellite,	Gun-cotton,	Schultz's powder,

and Tonite (or cotton powder).

(2) Any nitro-compound as hereinbefore defined, which is not comprised in Division. I.

Class 4. Chlorate-mixture Class.

The term "chlorate-mixture" means any explosive containing a chlorate.

The chlorate-mixture class is sub-divided as follows :—

(*a*) Division I comprising ;—

(1) Such explosives as—

Permonite and Polarite.

(2) Any chlorate preparation which consists partly of nitro-glycerine or of some other liquid nitro-compound.

(*b*) Division 2 comprising :—

(1) Such explosives as—

Cheddite, Steelite.

(2) Any chlorate-mixture as hereinbefore defined, which is not comprised in Division I.

Class 5.—Fulminate Class.

The term "fulminate" means any chemical compound or mechanical mixture, whether included in the foregoing classes or not, which, from its great susceptibility to detonation, is suitable for employment in percussion caps or any other appliances for developing detonation, or which, from its extreme sensibility to explosion, and from its great instability (that is to say, readiness to undergo decomposition from very slight exciting causes), is especially dangerous.

This class consists of two divisions :—

(*a*) Division 1 comprises such compounds as the fulminates of silver and of mercury, and preparations of these substances, such as are used in percussion caps, and any preparation consisting of a mixture of a chlorate with phosphorus, or certain descriptions of phosphorus compounds with or without the addition of carbonaceous matter, and any preparation consisting of a mixture of a chlorate with sulphur, or with a sulphide (sulphuret), with or without carbonaceous matter; and

(*b*) Division 2 comprises such substances as the chloride and the iodide of nitrogen, fulminating gold and silver, diazobenzol and the nitrate of diazobenzol.

Class 6.—Ammunition Class.

The term "ammunition" means an explosive of any of the foregoing classes when enclosed in any case or contrivance, or otherwise adopted or prepared so as to form a cartridge or charge for small arms, cannon, or any other weapon, or for blasting, or to form any safety or other fuze for blasting, or for shells, or to form any tube for firing explosives, or to form a percussion cap, a detonator, a fog-signal, a shell, a torpedo, a war-rocket or other contrivance other than a firework.

The term "percussion cap" does not include a detonator.

The term "detonator" means a capsule or case which is of such strength and construction, and contains an explosive of the fulminate-explosive class in such quantity that the explosion of one capsule or case will communicate the explosion to other like capsules or cases.

The term " safety fuze " means a fuze for blasting which burns and does not explode, and which does not contain its own means of ignition, and which is of such strength and construction and contains an explosive in such quantity that the burning of one fuze will not communicate laterally with other like fuzes.

The expression " safety cartridges " means cartridges for small arms, of which the case can be extracted from the small arm after firing, and which are so closed as to prevent any explosion in one cartridge being communicated to other cartridges. The term also includes rifle calibre machine-gun cartridges if they are of the above description, whether they are for use with machine-guns having chambers identical with those of rifles or with machine-guns which have special chambers :—

The maximum gauge at which a small-arm cartridge can be accepted as " safety " is one inch.

The following are the gauges of the machine-gun cartridges which may be accepted as " safety "

·303-inch cordite.
Martini-Henri rifle, solid case,
·45-inch Gardener, Gatling and Nordenfeldt, except Martini-Henri chambered guns ·4-inch.

Cartridges of larger gauge are not safety cartridges.

The ammunition class has three divisions :—

(*a*) Division 1 comprises exclusively—

Safety cartridges,
Safety fuzes for blasting,
Railway fog-signals,
Percussion caps ; and

(*b*) Division 2 comprises any ammunition as hereinbefore defined which does not contain its own means of ignition, and is not included in division 1, such as—

Cartridges for small arms, which are not safety cartridges,
Cartridges and charges for cannon, shells, mines, blasting, or other like purposes
Shells and torpedoes containing any explosive,
Fuzes for blasting, which are not safety fuzes—including electric fuzes which are not detonator fuzes,
Fuzes for shells,
Tubes for firing explosives,
War-rockets ;

which do not contain their own means of ignition ; and

(*c*) Division 3 comprises any ammunition as hereinbefore defined which contains its own means of ignition, and is not included in division 1, such as—

Detonators,
Cartridges for small arms, which are not safety cartridges,
Fuzes for blasting, which are not safety fuzes—including detonator fuzes.
Fuzes for shells,
Tubes for firing explosives ;

which do contain their own means of ignition.

Explanation—The expression " ammunition containing its own means of ignition" means ammunition having an arrangement, whether attached to it or forming part of it, which is adapted to explode or fire the same by friction or percussion.

Class 7.—Firework Class.

The firework class has two divisions :—

(*a*) Division 1 comprising " firework compositions, " that is to say, (i) any chemical compound or mechanically mixed preparation of an explosive of inflammable nature which is used for the purpose of making manufactured fireworks, and is not included in the former classes of explosives, and (ii) any " star " and (iii) (except as declared in the proviso) any colored fire composition ; and

(*b*) Division 2 comprising manufactured fireworks," that is to say, any explosive of any of the foregoing classes and any firework composition, when such explosive or composition is enclosed in any case or contrivance, or is otherwise manufactured so as to form a squib cracker, toy cap or amorce, serpent, rocket (other than a war-rocket), maroon, lance, wheel, Chinese fire, Roman candle, or any other article specially adapted for the production of pyrotechnic effects or pyrotechnic signals or sound signals.

Provided that a substantially constructed and hermetically closed metal case containing not more than one pound of colored-fire composition of such a nature as not to be liable to spontaneous ignition, shall be deemed to be a " manufactured firework " and not a " firework composition."

The 7th (firework) class shall not include any explosive or composition which is liable to ignite spontaneously whether it forms part of a manufactured firework or not or any manufactured firework which contains its own means of ignition, but shall include amorces as herein defined.

Amorces (whether in the form of toy-caps or igniting tapes) must consist of dots of one or other of the undermentioned compositions enclosed between two pieces of paper or separated by a sheet of paper or cardboard, in a proportion not exceeding seventy grains of such composition to every one thousand dots.

Composition (a).—A mixture of chlorate of potassium and amorphous phosphorus, with or without the addition of (1) nitrate of potassium, sulphide of antimony and powdered sulphur (free from acid), or (2) chalk, rye, flour and resin (sandarak), or (3) manganese and glue; provided that the amount of amorphous phosphorus in the mixture shall in no case exceed the proportion of ten grains in one thousand dots.

Composition (b),—A mixture of chlorate of potassium and ferro-cyanide of lead.

PROHIBITED EXPLOSIVES.

The manufacture, possession or importation of the following explosives is hereby prohibited under Section 5 of the Regulation, except under a license from the Government of Mysore, but the manufacture and possession of such explosives at any place is permitted so far as is necessary, in the course of the manufacture at such place under license of the Government of Mysore, of other explosives.

List of prohibited explosives —

(1) Nitro-glycerine and all other liquid explosives.
(2) All explosives belonging to the 3rd (nitro-compound) class which are of inferior quality or have become deteriorated in any way.
(3) Fortis explosive and ammonite.
(4) All explosives belonging to the 4th (chlorate-mixture) class (except such as the Government of Mysore may hereafter notify in the Official Gazette and which have not become deteriorated in any way).
(5) All explosives belonging to the 5th (fulminate) class.
(6) All explosives belonging to the 6th (ammunition) or 7th (firework) class which contain prohibited explosives (e.g. explosives of the 5th class for the purpose only of developing detonation and except amorces).

WD 01084—GPB—100—24-10-22

APP. F. VI. Gl.]

8

SUBJECT.....

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Section Gool

File No. 15-6

Serial No 2

No. D 10986 of 8/6/27

Diary No. of letter replied to 478

General and Revenue Secretariat

( )

the *192*

To

The Chief Inspr

of Mines

Sir

Date of issue 8-6-27

Signed by Mr Mehaz

With reference to your letter No. 141 of 22-7-26 requesting orders of Govt as regards certain addition proposed to be included ~~in~~ under Condition ~~to~~ to Form E of the Explosives Rules I am directed to request You to submit for the consideration of Govt and for publication in the Gazette a draft amendment—

List of enclosures.....

Copied by.....

Examined by.....

over

WD 01265—GPB—31,000—24-12-25

the rules & ca. proposed
to be made.

Shaw & Co

WP
7/6
Der. Sec

No.

General and Revenue

D.M.E. 34.]

Telegraphic address:
"MINESPECTOR."

DEPARTMENT OF MINES AND EXPLOSIVES.

OFFICE OF THE CHIEF INSPECTOR OF MINES IN MYSORE.

Put up with Regn. order

Dated, Oorgaum.....17th.....June.....1927.
(S. India.)

No. 2213 Geol.
Encl. 2

8671

FROM C.E. Suryanarayana Rao, Esq., Mem. A.I.M.E., etc.,
Ag. CHIEF INSPECTOR OF MINES IN MYSORE.

Geol. 15. 26. 3

To

N. Rama Rao, Esq., B.A., B.L.,
Secretary to the Government of His Highness
the Maharaja of Mysore,
Development Departments, BANGALORE.

Sir,

With reference to your letter No. D.10986/Geol. 15-26-2 dated 8th June 1927, I have the honour to submit herewith for the consideration of Government and for publication in the Gazette a draft amendment to the Conditions of License Form E, (Articles 7 and 8, Schedule I), Mysore Explosives Rules, together with an explanatory memo showing the nature and object of the proposed amendment.

I have the honour to be,
Sir,
Your most obedient servant,

CESRau

Ag. CHIEF INSPECTOR OF MINES
IN MYSORE.

NOTE—Contn. sheet

WD 0324—GPB—60,000—24-5-27

MYSORE EXPLOSIVES RULES.

Draft amendment.

Schedule II - Pages 60 and 61.

License Form E (Articles 7 & 8 of Schedule I)

Add the following as additional conditions after condition 7 :

8. All blasting operations should as far as possible be conducted by a certified blaster.

9. The blaster should himself prepare the fuse, detonator and primer for use and should charge every hole, but he may be assisted otherwise in the preparation of charges and in firing, by one or more competent assistants.

10. During the preparation of charges and the charging of holes and while explosives are being handled, smoking should be strictly prohibited.

11. The fuse with its attached detonator should, after being inserted in the primer cartridge, be securely fastened by a string or other suitable material so that it cannot be easily withdrawn from the cartridge. The fuse and the detonator should not be inserted in the primer until it is required for immediate use.

12. In charging or stemming holes, the use of any iron or steel tool, scraper or rod is prohibited and no explosive should be forcibly pressed into a hole of insufficient size.

13. Even with wooden implements the cartridges should be squeezed home gently in the borehole, and never rammed with any force that might be liable to establish dangerous friction.

14. A wad of paper about one inch thick must be inserted immediately on the top of the primer and below the

tamping

tamping which should be at least 6" deep. Only sand loosely filled in or soft clay lightly pressed home or water, should be used as tamping for any explosive requiring the use of detonator.

15. No more than eight holes at a time in a place exceeding 60 sq. feet and not more than 6 holes in smaller area, should be fired in the same round.

16. Blasting gelatine or other high explosive should not be lighted in order to set fire to fuses, but a small portion of such explosive may be attached to the end of a fuse to assist it to ignite.

17. The number of shots which explode must be counted independently by at least two persons, one of whom should be the blaster. Unless both are certain that all the charges have exploded the working place must not be re-entered for at least 30 minutes after the first explosion.

18. After blasting has taken place, the blaster or person in charge of the working place should be the first to re-enter the place and until he has pronounced that there was no misfire and that the place is sufficiently free from fumes he should not permit any other person to enter except for the purpose of making it safe.

19. In clearing the stuff broken by the blast, loose unexploded cartridges, detonators, etc., must be carefully looked for and if found, removed at once by the blaster or mestri in charge, to a safe place.

20. Before drilling is commenced, all loose rock must be removed from the working faces and if any sockets or portions of holes, which have not broken are found they should be securely plugged with wooden plugs of which a supply should always be provided.

21. In the event of a misfire (or charge failing to explode properly) having occurred or being suspected, the blaster should be the first to re-enter the working place. He should search for the misfire and, if necessary, may have the place cleaned up for the prupose; but he should permit no other person or work.

22. As soon as the misfire has been found, the blaster should refire it without delay, for which purpose he should insert a fresh primer with detonator and fuse in the hole. If necessary, the tamping may be gently removed with a wooden or copper scraper, but not the paper wad.

23. Boring out or deepening holes once charged or withdrawing a charge either before firing or after misfire, must not be attempted.

24. The person in charge of working place should point out the position and direction of every new hole to be drilled and should be responsible that the drillers do not deviate therefrom. The greatest care should be taken to see that no new hole is bored in such a direction that it can come in dangerous proximity to any old hole or socket in which explosives have previously been charged.

25. A fuse which has apparently missed or is hanging fire should not be approached for at least half an hour.

26. The burning capacity and steady consumption of any fuse employed and its requisite length have to be carefully studied and noted before use and only fuses of known quality and rate of burning should be used.

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C E S Rao

Ag. CHIEF INSPECTOR OF MINES

IN MYSORE.

R.S.

EXPLANATORY MEMO SHOWING THE NATURE AND OBJECT OF AMENDMENT PROPOSED TO BE MADE TO THE RULES UNDER THE MYSORE EXPLOSIVES REGULATION, (II of 1888).

Reference	Nature of amendment	R e m a r k s.
Schedule II - pages 60 & 61. License Form E (Articles 7 and 8 of Schedule I)	Addition to the existing conditions of the License.	The amendment proposed to be made is based on the rules in force under the Mysore Mines Regulation - Blasting, Chapter XIV - Mysore Mining Rules. The list of precautions prepared on the above basis and published by this Department for the guidance of persons engaged in blasting operations has not had the effect of minimising the occurrence of blasting accidents. It is therefore suggested that these precautions be now embodied in the License Form as additional conditions so that the licensee can be held primarily responsible for the due fulfilment thereof.

C.S.Rau

Ag. CHIEF INSPECTOR OF MINES
IN MYSORE.

Dated 17th June 1927.

R.S.

15 encl. 18-26 Let 27

D.M.E. 34]

Telegraphic address:
"MINESPECTOR."

DEPARTMENT OF MINES AND EXPLOSIVES.

OFFICE OF THE CHIEF INSPECTOR OF MINES IN MYSORE,

No. 657
Encl. 2.

Dated Oorgaum, 18th October 1927.
(S. India)

19/10/27 Issued

GEN. & REV. SECRETARIAT, 19 OCT. 1927 DEVELOPMENT BRANCH.

FROM

C.E. Suryanarayana Rao, Esq., Mem. A.I.M.E., &c
~~EXECUTIVE, Esq., I.P.~~

Ag. CHIEF INSPECTOR OF MINES IN MYSORE.

To

N. Rama Rao, Esq., B.A., B.L.,
Secretary to the Government of His Highness
the Maharaja of Mysore, Development Departments,
BANGALORE.

Sir,

With reference to your letter No.D.95/Geol.44-27 dated 14-10-27, I have the honour to state that the license forms under the Mysore Explosives Rules are at present issued in English only and that arrangements will be made to have them printed in Kannada also and distributed among the various District Magistrates. In the meantime, I request you to be so good as to have the enclosed "List of authorised explosives" (to be printed along with each license form) rendered into Kannada in the Translation Branch of the Secretariat and sent to me for getting the same printed.

In this connection, I wish to bring to the notice of Government that certain amendments to license Form E were suggested in this office letter No.2213 dated 17-6-27 and if they are approve of by Government, the additional conditions proposed will also have to be translated. A copy of the proposed amendments is likewise submitted herewith for being rendered into Kannada.

Early orders of Government are solicited in the matter.

I have the honour to be,
Sir,
Your most obedient servant,

C S Rau

Ag. CHIEF INSPECTOR OF MINES
IN MYSORE.

R.S.

Ry Govt. 15-26-5

No D-5344 D/19-11-27

Notification.

The following draft of the additional conditions which Govt propose to embody in License Form E. issued under the Mysore Explosives Rules ~~which the Govt. propose to embody~~ is published under section 15(3) of the Mysore Explosives Regulations II of 1888, for the information of persons likely to be affected thereby, and notice is hereby given that the draft will be taken into consideration on or after the 1st January 1928 and that any objections or suggestions which may be received from any persons with respect to the said draft before the date aforesaid will be considered by Govt.

(Here print the additional conditions

Enclosed

By Order,

10/11

Secretary to Government
Development Departments

To

The Compiler Mysore Gazette for publication in 3 successive issues of the Gazatte

-:0:-

Memo. No D 5344 - /Govt 15-26-5 D/19 11/27

Copy forwarded with compliments to the Chief Inspector of Mines for information with reference to correspondence ending with his letter No. 657 dated 18-10-27

By order
10/11

MYSORE EXPLOSIVES RULES.

-:o:

Draft amendment.

SCHEDULE II - PAGES 60 and 61.

License Form E (Articles 7 and 8 of Schedule I).

Add the following as additional conditions after condition 7:-

The licensee shall observe the following precautions in carrying out blasting operations:-

8. All blasting operations should as far as possible be conducted by a certified blaster.

9. The blaster should himself prepare the fuse, detonator and primer for use and should charge every hole, but he may be assisted otherwise in the preparation of charges and in firing, by one or more competent assistants.

10. During the preparation of charges and the charging of holes and while explosives are being handled, smoking should be strictly prohibited.

11. The fuse with its attached detonator should, after being inserted in the primer cartridge, be securely fastened by a string or other suitable material so that it cannot be easily withdrawn from the cartridge. The fuse and the detonator should not be inserted in the primer until it is required for immediate use.

12. In charging or stemming holes, the use of any iron or steel tool, scraper or rod is prohibited and no explosive should be forcibly pressed into a hole of insufficient size.

13. Even with wooden implements the cartridges should be squeezed home gently in the borehole, and never rammed with any force that might be liable to establish dangerous friction.

14. A wad of paper about one inch thick must be inserted immediately on the top of the primer and below the tamping which

E.S.Rau

should

should be at least 6" deep. Only sand loosely filled in or soft clay lightly pressed home or water, should be used as tamping for any explosive requiring the use of a detonator.

15. No more than eight holes at a time in a place exceeding 60 sq. feet and not more that 6 holes in smaller area, should be fired in the same round.

16. Blasting gelatine or other high explosive should not be lighted in order to set fire to fuses, but a small portion of such explosive may be attached to the end of a fuse to assist it to ignite.

17. The number of shots which explode must be counted independently by at least two persons, one of whom should be the blaster. Unless both are certain that all the charges have exploded the working place must not be re-entered for at least 30 minutes after the first explosion.

18. After blasting has taken place, the blaster or person in charge of the working place should be the first to re-enter the place and until he has pronounced that there was no misfire and that the place is sufficiently free from fumes he should not permit any other person to enter except for the purpose of making it safe.

19. In clearing the stuff broken by the blast, loose unexploded cartridges, detonators, etc., must be carefully looked for and if found, removed at once by the blaster or mestri in charge, to a safe place.

20. Before drilling is commenced, all loose rock must be removed from the working faces and if any sockets or portions of holes, which have not broken are found they should be securely plugged with wooden plugs of which a supply should always be provided.

21. In the event of a misfire (or charge failing to explode properly) having occurred or being suspected, the blaster

should

should be the first to re-enter the working place. He should search for the misfire and, if necessary, may have the place cleaned up for the purpose; but he should permit no other work.

22. As soon as the misfire has been found, the blaster should refire it without delay, for which purpose he should insert a fresh primer with detonator and fuse in the hole. If necessary, the tamping may be gently removed with a wooden or copper scraper, but not the paper wad.

23. Boring out or deepening holes once charged or withdrawing a charge either before firing or after misfire, must not be attempted.

24. The person in charge of the working place should point out the position and direction of every new hole to be drilled and should be responsible that the drillers do not deviate there from. The greatest care should be taken to see that no new hole is bored in such a direction that it can come in dangerous proximity to any old hole or socket in which explosives have previously been charged.

25. A fuse which has apparently missed or is hanging fire should not be approached for at least half an hour.

26. The burning capacity and steady consumption of any fuse employed and its requisite length have to be carefully studied and noted before use and only fuses of known quality and rate of burning should be sued.

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C E S Rau

Ag. CHIEF INSPECTOR OF MINES

IN MYSORE.

R.S. 17/6/27.

23

A. P. F. VI. G11

SUBJECT.....

.....

.....

Section Gen.

File No 15226

Serial No. 6

No. D 7656.

Diary No. of letter replied to..... 3317

General and Revenue Secretariat

( )

the 192

Date of issue 24-1-28

Signed by..... for N. A. A.

To Notification

the following additional conditions to licenses in Form IE under the Explosives Rules the draft of which was notified in Order No. D.5344/Gen.15-26-5-19 dated 27 and are published for general information:

Sanctioned and

Copy C

Add the following as additional conditions after condition 7 in the ~~Schedule~~

The licensee shall observe the following precautions in carrying out blasting operations: -

8. All blasting operations should as far as possible be conducted by a certified blaster.

List

9. The blaster should himself prepare the fuse, detonator and primer for use and should charge every hole, but he may be assisted otherwise in the preparation of charges and in firing, by one or more competent assistants.

Copies

10. During the preparation of charges and the charging of holes and while explosives are being handled, smoking should be strictly prohibited.

Exam i

11. The fuse with the detonator should after being

2. [illegible] suitable material to hold it in contact with and [illegible] the cartridge. The fuse and the detonator must not be inserted in the primer until it is required for [illegible] use.

12. In charging or stemming holes, the use of any iron or steel tool, scraper or rod is prohibited and no explosive should be forcibly pressed into a hole of insufficient size.

13. Even with wooden implements the cartridges should be squeezed home gently in the borehole, and never rammed with any force that might be liable to establish dangerous friction.

14. A wad of paper about one inch thick must be inserted immediately on the top of the primer and below the tamping which should be at least 6" deep. Only sand loosely filled in or soft clay lightly pressed home or water, should be used as tamping for any explosives requiring the use of a detonator.

15. No more than eight holes at a time in a place exceeding 60 sq., feet and not more than 6 holes in smaller area, should be fired in the same round.

16. Blasting gelatine or other high explosive should not be lighted in order to set fire to fuses, but a small portion of such explosive may be attached to the end of a fuse to assist it to ignite.

17. The number of shots which explode must be counted independently by at least two persons, one of whom should be the blaster. Unless both are certain that all the charges have exploded the working place must not be re-entered for at least 30 minutes after the first explosion.

18. After blasting has taken place, the blaster or person in charge of the working place should be the first to re-enter the place and until he has pronounced that there was no misfire and that the place is sufficiently free from fumes he should not permit any other person to enter except for the purpose of making it safe.

19. In clearing the stuff broken by the blast, loose unexploded cartridges, detonators, etc., must be carefully looked for and if found, removed at once by the blaster or mestri in charge, to a safe place.

20. Before drilling is commenced, all loose rock must be

3/ removed from the boring fuses and if any sockets or portion which have not broken are found they should be securely plugge wooden plugs of which a supply should alway be provided.

21. In the event of a misfire (or charge failing to explo properly) having occurred or being suspected, the blaster should be the first to re-enter the working place. He should search for the misfire and, if necessary, may have the place cleaned up for the purpose; but he should permit no other work.

22. As soon as the misfire has been found, the blaster should refire it without delay, for which purpose he should insert a fresh pri or with detonator and fuse in the hole. If necessary, the tamping may be ~~drawn~~ gently removed ~~with~~ with a wooden or copper scraper, but not the paper and wad.

23. Boring out or deepening holes once charged or withdrawing a charge either before firing or after misfire, must not be attempt- ed.

24. The person in charge of the working place should point out the position and direction of every new hole to be drilled and should be responsible that the drillers do not deviate therefrom. The greatest care should be taken to see that no new hole is bored in such a direction that it can come in dangerous proximity to any old hole or socket in which explosives have previously been charged.

25. A fuse which has apparently missed or is hanging fire should not be approached for at least half an hour.

26. The burning capacity and steady consumption of any fuse employed and its requisite length have to be carefully studied and noted before use and only fuses ~~xx~~ of known quality and rate of burning should be used.

By order

WH 7/1/26 Secy. to Govt

Mines Deptts.

To the Compiler Mysore Esq for publication in the Gazette + with a request that 50 Cps

WD 2230—GPB—1,00,000—23-7-26

the subject may be published
this office and 200 bottles
Chief Insptr of Mines and
Asst Commrs

—

Memo No D765-7 W 24-1-28

copy forwarded with
compliments to the Chief
Inspr of Mines in Mysore

By order

Secy to Govt
Dev: Deptt

VB

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE,

General and Revenue Secretariat,

No. D. 7656
Genl 15=26-6

Dated Bangalore, 24-1-1928

NOTIFICATION.

The following additional conditions to licence bearing No. [illegible] under the Mysore Explosives Rules the draft of which was published in order No. [illegible] 7344/Genl 15-26-6 dated 19th November 1927 are hereby sanctioned and published for general information:-

[illegible] following as condition [illegible] condition 7.

The licensee should observe the following precautions in carrying out blasting operations:-

8. All blasting operations should as far as possible be conducted by a certified blaster.

9. The blaster should himself prepare the fuse, detonator and primer for use and should charge every hole, but he may be assisted otherwise in the preparation of cartridges and in charging, by one or more competent assistants.

10. During the preparation of cartridges and the charging of holes and while explosives are being handled, smoking should be strictly prohibited.

11. The fuse with its attached detonator should after being inserted in the primer cartridge, be securely fastened by a string or other suitable material so that it cannot be easily withdrawn from the cartridge. The fuse and the detonator should not be inserted in the primer until it is required for immediate use.

12. In boreholes or tunnelling holes, the use of any iron or steel tool, tamping or rod is prohibited and no explosive should be forcibly rammed into a hole of insufficient size.

13. Even with wooden implements the cartridges should be squeezed very gently in the borehole, and never rammed with any force that might be liable to establish dangerous friction.

14. A wad of paper about one inch thick must be inserted immediately on the top of the primer and below the tamping which should be put in at 6" deep. Only sand loosely filled in or soft clay with the prepared hole or water, should be used as tamping for any explosive requiring the use of a detonator.

15. No more than eight holes at a time in a place xxxxx exceeding 60 sq., feet and not more than 6 holes in smaller area, should be fired in the one round.

16. Blasting gel time or other high explosive should not be handled in order to get fire to fuses, but a small portion of such explosive may be attached to the end of a fuse to assist it to ignite.

17. The number of shots which explode must be counted independently by not less than two persons, one of whom should be the blaster. Unless both are certain that all the charges have exploded the working place must not be re-entered for at least 30 minutes after the first explosion.

18. After blasting in a trench or, the person in charge of the working place should be the first to re-enter the place and is to be satisfied that there was no misfire and that the place is sufficiently free from fumes or should not permit any other person to enter except for the purpose of making it safe.

19. In clearing the rock broken by the blast, loose un-exploded cartridges, detonators, etc., must be carefully looked for and if found, removed at once by the blaster or assistant in charge, to a safe place.

20. Before drilling is commenced, all loose rock must be removed from the working face and if any sockets or portions of holes which have not broken out found they should be securely plugged with wooden plugs of which a supply should always be provided.

21. In the event of an explosive (or charge) failing to explode

the misfire and, if necessary, may have the place cleaned up for the purpose; but he should permit no other work.

20. As soon as the misfire has been found, the blaster should refire it without delay, for which purpose he should insert a fresh primer with detonator and fuse in the hole. If necessary, the stemming may be gently removed with a wooden or copper scraper, but not the tamping wood.

21. Boring out of deep-drill holes once charged or withdrawing a charge either before firing or after misfire, must not be attempted.

22. The person in charge of the working place should point out the position and direction of every new hole to be drilled and should be responsible that the drillers do not deviate therefrom. The greatest care should be taken to see that no new hole is bored in such a direction that it may come in dangerous proximity to any old hole or cavity in which explosives have previously been charged.

23. A fuse which has apparently misfired or in which fire should not be appearing for at least half an hour.

24. The burning capacity and steady consumption of any fuse employed and its requisite length have to be carefully studied and noted before use and only fuses of known quality (neither too slow or too quick burning) should be used.

By Order,

for Secretary to Government,
Development Departments.

To

The Compiler
Mysore Gazette for publication in the Gazette.